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March 9, 2023  
File: 1614-13622

**Attention: Mr. Ali Soufan**  
York Developments  
303 Richmond Street  
London ON N6B 2H6

Dear Mr. Soufan,

**Reference: Sanitary Servicing Analysis  
Bostwick Residential Neighbourhood, City of London**

## **PURPOSE**

This report has been prepared in support of current and future draft plan applications by York Developments for the South-West Area of London. This report presents a detailed breakdown of the sanitary servicing for the South West area of London. This area has been studied extensively by both the City and by Development interests in the area. Over time, some of the trunk sanitary infrastructure has been constructed and some of the planning for the routing of future sewers has been modified. To date, these modifications have not been unified into a single planning document to ensure that all of the currently undeveloped lands in South West London have been properly accounted for. The purpose of this report, in particular, is to bring all of that information together into a single document in order to provide the City with a holistic look at sanitary servicing for the undeveloped lands in the South West area and to provide a template for all development applications moving forward.

## **EXISTING SANITARY OUTLETS**

Since the completion of the South West Area Plan, the City of London and the Development community have made significant investments in infrastructure to service the south west area. Sanitary outlets that have been extended into the undeveloped areas of this plan are catalogued as follows.

### **Southdale Road Outlet**

Construction of a sanitary sewer on Southdale Road to accept flows from the new Community Centre and other future development in 3080 Bostwick was completed in 2016. This sewer connects into an existing trunk sewer at the intersection of existing sewer at Farnham Road and Dalhousie Drive which discharges into the Westmount Sanitary Sewer System. Capacity in this sewer is limited. The removal of the Crestwood Pumping Station and the redirection of flows in the Crestwood West area sent flows downstream to the newly constructed Colonel Talbot Pumping Station. The redirection of these flows created 26.5 l/s of capacity in the Westmount Sanitary Sewer system which has been allocated to growth in 3080 Bostwick.

Reference: Sanitary Servicing Analysis Bostwick Residential Neighbourhood, City of London

### **Bradley Avenue Outlet**

The City of London extended the existing Wonderland Road sewer northerly on Wonderland Road to service the proposed Casino Lands on Wonderland Road in 2019. With the extension of this sewer, an opportunity was created to ensure that sewer had sufficient depth and capacity to receive flows from a portion of the Bostwick West area. Through discussions between the City, Stantec and the effected landowners, York Developments and the Muslim Association of Canada, the sewer was constructed to the intersection of Wonderland and Bradley Ave. A future extension to this sewer along Bradley Avenue crossing the Hydro One corridor will be required.

The as-constructed drawings for the Wonderland Road Sanitary Sewer Extension show the catchment area in Bostwick West as Ext 1A (5.27 ha, 527 pop) and Ext 1B (19.47 ha, 2615 pop) and has allowed capacity to receive 24.74 ha of catchment area at a population of 3,142. Total peak flow capacity for this catchment area is calculated at **31.12 l/s**.

### **Exeter Road Outlet**

Construction on the Wonderland Road trunk sanitary sewer was completed in 2018 which extended that sewer up Wonderland Road and along Exeter Road to approximately 125m east of the intersection of Wharnccliffe Road. The Exeter Road sewer was originally intended to receive flows from the entire Bostwick West area, however, with the construction of the Bradley Avenue Outlet noted above, this sewer has a reduced catchment area.

The as-constructed drawings for the Southwest Area Trunk Sanitary Sewer – Phase 3 show this catchment area as Ext 4 and has allowed capacity to receive 172.36 ha of catchment area at a population of 22,347. Noting that the Bradley Avenue outlet could redirect some of these flows into the system on Wonderland Road, the area from Bostwick East now contributing to the Bradley Avenue trunk could be removed from the capacity of the Exeter Road outlet. Thus the capacity of this sewer could be reduced to 147.62 ha of catchment area at a population of 19,205. For the scenario, total peak flow capacity for this catchment area is calculated at **149.44 l/s**.

### **Campbell Street Outlet**

The Campbell Street sub-trunk sewer is a branch of the Wonderland Road Trunk Sanitary sewer. This sewer was constructed in 2015 and 2016 and connects to the Wonderland Trunk sewer at Hamlyn Street. The sub-trunk extends along Hamlyn to Campbell Street where it was constructed northerly to service existing development in Lambeth along with growth north of Lambeth as far north as Royal Magnolia Avenue.

This outlet splits at Beattie Street with one subtrunk continuing northerly along Campbell Street. This branch is currently constructed to the intersection of Ayrshire Avenue and has capacity to receive 855.29 ha of catchment area at a population of 46,819. Total peak flow capacity for this catchment area is calculated at **371.09 l/s**.

The other branch is constructed easterly along Beattie Street and eventually terminating at the north end of Savoy Street just north of the intersection of Bakerville Street and has capacity to receive 73.10 ha of

**Reference:** Sanitary Servicing Analysis Bostwick Residential Neighbourhood, City of London

catchment area at a population of 3972. Total peak flow capacity for this catchment area is calculated at 42.58 l/s.

### **Colonel Talbot Pumping Station**

The Colonel Talbot Pumping Station was completed in 2021 and is located on the east side of Colonel Talbot Road, north of Royal Magnolia Avenue. The station was constructed to receive flows from existing and new development generally west of Bostwick Road and north of Royal Magnolia Avenue to the west limit of the urban growth boundary and to the north to include existing developed areas north of Southdale Road. The construction and commissioning of this station caused the decommissioning of the Crestwood Pumping Station, the Westfield Village Pumping Station and the North Talbot Pumping Station and consolidated flows to this station which in turn sends flows north eventually discharging to the Oxford PCP.

### **SANITARY CRITERIA**

In order to determine the sanitary populations and flows, information was taken from various sources. For the lands within the 3080 Bostwick property, York Developments had advanced concept plans for each of these blocks. These concept plans showed densities higher than the City criteria so the concept plan unit counts were used in these blocks as outlined further in this report. Where concept plans were not available, draft plan and/or land use designations were used in conjunction with the following design criteria as per City of London standards:

Low Density Residential	30 units/hectare	3 people/unit
Medium Density Residential – Street Towns	30 units/hectare	2.4 people/unit
Medium Density Residential	75 units/hectare	2.4 people/unit
Medium Density Apartments	100 units/hectare	1.6 people/unit
High Density Residential	300 units/hectare	1.6 people/unit
Residential Commercial	185 units/hectare	1.6 people/unit

Design Flow – 230 litres/capita/day

Infiltration Allowance – 0.1 litres/second/hectare

Reference: Sanitary Servicing Analysis Bostwick Residential Neighbourhood, City of London

## **PROPOSED SANITARY SERVICING STRATEGY**

### **Sanitary Servicing for the Campbell Street Sewer**

The planned trunk sanitary sewer extension is shown on the attached figure and is intended to follow a westerly route along Fallingbrook Road before connecting with Royal Magnolia Avenue at the intersection of Castle Oaks Street. This trunk will continue northerly through Area 11 and connect to the Colonel Talbot Pumping Station. The intention of this connection is to provide an emergency relief to the pumping station and to provide the City with the ability to shunt flows away from the Oxford PCP to the Greenway PCC.

The interim servicing strategy for the initial phases of the W3 subdivision is to extend the existing sewer along Campbell Street from its current terminus at Ayrshire Avenue into the W3 subdivision. This will provide an outlet for several of the catchment areas on an interim basis as outlined in the following sections until a main sewer from W3 subdivision is connected to the Colonel Talbot Pumping Station via a connection to the trunk sewer on Colonel Talbot Road that feeds the pumping station.

This report does not include an assessment of the catchment areas with Auburn Development's Heathwood subdivision as these catchments are defined in the detailed design drawings for that subdivision.

Reference: Sanitary Servicing Analysis Bostwick Residential Neighbourhood, City of London

### Area 1 Catchment

This catchment area has generally been referred to as 3080 Bostwick Road and has been the subject of a variety of servicing reports issued by Stantec on behalf of York Developments. The discharge point for these lands is the existing sanitary sewer on Southdale Road at Farnham Ave. The table below outlines the various land uses within the catchment area and is based on the current concept plans advanced by York Developments for the individual blocks. (see attached detailed calculations for this area)

As noted during recent discussions, the maximum allowable peak flow from this area, including the Community Centre is 26.5 L/s, which after removing the 7.5 L/s for the Community Centre, leaves 19.0 L/s (1968 population) for the remaining development. Within the current draft plan, which exists of Blocks 1 through 6 and the streets, as noted by the Interim Population totals, blocks 1 through 5 generate 17.03 L/s, which is within the capacity allotted and the subdivision has the capacity to proceed. Block 6 flows south to the Bradley Avenue Outlet.

Ultimately, Block 7, which is not within the draft plan, could provide flows to this system as there is no other outlet available for this block. In order to provide capacity for Block 7, it is proposed that Block 5 flows be re-directed to either Area 2 (Bradley Ave Sewer) or Area 3(Exeter Rd Sewer), and in doing so, allow for development of Block 7. Block 7 would be restricted to 476 apartment units or 762 people, bringing the total flows for Blocks 1,2,3,4 and 7 to 19 L/s. This is outlined in the Ultimate Population column below.

	Area (ha)	Units		Density	Interim Population	Ultimate Population
Severance Block - SE corner of Southdale and Bostwick (Block 1)	1.54	370	apartment units	1.6 ppu	592	592
		2397	m2 gfa commercial	see note below	96	96
Draft Plan - Block 2	0.92	144	apartment units	1.6 ppu		
		20	townhouse units	2.4 ppu	278	278
Severance Block - SE corner of Southdale and Street 'A' (Block 3)	1.124	150	apartment units	1.6 ppu	240	240
Draft Plan - Block 4	0.636		Park			
Severance Block - SE corner of Southdale and Street 'B'( Block 5)	1.137	324	apartment units	1.6 ppu		
		255.4	m2 gfa commercial	see note below	529	
Streets 'A', 'B', 'C'	2.341		Road allowance			
Block 7 - south of Street 'C' west of the Thornicroft	1.936	0	townhouse units	2.4 ppu		
		476	apartment units	1.6 ppu		762
<b>Total</b>	<b>9.63</b>				<b>1735</b>	<b>1968</b>
Commercial and office density utilizes the City standard of 100 persons/ha at a 25% coverage. The conversion giving 25 persons per ha of gross floor area.						
Peaking factor includes an equivalent population of 680 to account for the community centre.						

Reference: Sanitary Servicing Analysis Bostwick Residential Neighbourhood, City of London

## Area 2 Catchment

The Area 2 Catchment represents lands which are serviced either east to the Bradley Avenue sanitary sewer described in previous sections or south to the Exeter Road sewer. These lands represents residential lands in the central portion of the Bostwick West area and include the lands at 457 Southdale Road which are currently owned by the Muslim Association of Canada and are intended to be developed as a mosque and community centre.

In order to provide a sanitary outlet to this area, the existing sewer on Wonderland Road will need to be extended along Bradley Avenue across the Hydro corridor. It should be noted that this sewer was placed at an elevation to service the lands delineated in Area 2 but that the sewer lacks sufficient depth to cross the Thornicroft drain and thus cannot be used as a discharge for lands west of the Thornicroft.

The table below outlines the various land uses within the catchment area. Based on these calculations, this area is expected to generate **25.1 l/s** under peak flow conditions.

	Area (ha)	Units			Density	Population
Medium Density	4.456	334		Unit count using 75 u/ha	2.4 p/u	535
Medium Density - Street Towns	1.234	37		Unit count using 30 u/ha	2.4 p/u	89
High Density (Block 6 of Bostwick draft plan)	1.23	307	Apartment Units	Unit count taken from concept plans	1.6 p/u	491
High Density (Block 67 - Site 8)	0.53	167	Apartment Units	Unit count taken from concept plans	1.6 p/u	267
High Density (Block 68 - Site 9)	1.211	24	Townhouse Units	Unit count taken from concept plans	2.4 p/u	58
		355	Apartment Units	Unit count taken from concept plans	1.6 p/u	568
457 Southdale Road	5.29				100 p/ha	529
Roadways and Other Blocks	0.92	0				0
<b>Total</b>	<b>14.87</b>					<b>2537</b>

Reference: Sanitary Servicing Analysis Bostwick Residential Neighbourhood, City of London

### Area 3 Catchment

The Area 3 Catchment represents lands which are at the mid and south end of the Bostwick West area and east of the Thornicroft Drain as shown on the attached figure. These lands are serviced to the Exeter Road sanitary sewer described in previous sections. This sewer is currently constructed to approximately 125 m east of Wharncliffe Road. As shown on the attached figure, an extension of this sewer would be required to Wharncliffe Road and through the intersection to the proposed entrance of the development onto Wharncliffe Road. The sewer would then be extended within the development lands to Kilbourne Road where it would then cross the Thornicroft Drain to provide an outlet to lands west of the Thornicroft.

The table below outlines the various land uses within the catchment area.

	Area (ha)	Units		Density	Population
Low Density	7.657	230	Unit count using 30 u/ha	3 p/u	689
Medium Density	3.768	283	Unit count using 75 u/ha	2.4 p/u	678
Medium Density - Street Towns	8.091	243	Unit count using 30 u/ha	2.4 p/u	583
High Density	1.84	552	Unit count using 300 u/ha	1.6 p/u	883
Residential Commercial	0.786	145.41	Unit count using 185 u/ha	1.6 p/u	233
Roadways and Other Blocks	19.59	0			0
Existing Commercial Development	4.72		100 ppl/Ha		472
<b>Total</b>	<b>46.45</b>	<b>1452</b>			<b>3538</b>

### Area 4 Catchment

The Area 4 Catchment represents lands which are at the south end of the Bostwick West area, west of the Thornicroft Drain and east of Bostwick Road as shown on the attached figure. These lands are planned to be serviced to the Exeter Road sanitary sewer through the extension of this sewer through Area 3 as described above. Preliminary review of the Exeter Road sewer indicates that this sewer has sufficient depth to pass under the Thornicroft Drain at its intersection with Kilbourne Road.

As shown on the attached figure, this area consists of a distinct north and south portion. The southern portion can connect directly to the sanitary sewer on Kilbourne Road. The northern portion will require an extension of that sewer. An alignment will need to be determined as draft plans progress in this area.

The table below outlines the various land uses within the catchment area.

Reference: Sanitary Servicing Analysis Bostwick Residential Neighbourhood, City of London

	Area (ha)	Units		Density	Population
Low Density	7.699	231	Unit count using 30 u/ha	3 p/u	693
Medium Density	5.154	387	Unit count using 75 u/ha	2.4 p/u	928
Medium Density - Street Towns	0.25	8	Unit count using 30 u/ha	2.4 p/u	18
Medium Density Apartments	5.078	508	Unit count using 100 u/ha	1.6 p/u	813
Roadways and Other Blocks	4.79	0			0
<b>Total</b>	<b>22.97</b>	<b>1134</b>			<b>2452</b>

### Area 5 Catchment

The Area 5 Catchment represents lands which are west of Bostwick Road and south of Pack Road, known as Westwinds Subdivision. This area is planned to contribute to the Colonel Talbot Pumping station via the proposed local sewer through Areas 7, 8 and 11 described further in this report. Alternatively, these lands could be serviced by the extension of the Exeter Road sewer through Areas 3 and 4 as outlined above.

The draft plan concept for this catchment from the developer indicates, the land will be developed as single family and medium density residential lots. The table below outlines the various land uses within the catchment area.

	Area (ha)	Units		Density	Population
Medium Density - Street Towns	1.902	57	Unit count using 30 u/ha	2.4 p/u	137
Medium Density Apartments	7.734	774	Unit count using 100 u/ha	2.4 p/u	1858
Low Density	2.512	75	Unit count using 30 u/ha	3 p/u	225
Roadways and Other Blocks	4.035				0
<b>Total</b>	<b>16.183</b>				<b>2220</b>



Reference: Sanitary Servicing Analysis Bostwick Residential Neighbourhood, City of London

### Area 6 Catchment

The Area 6 Catchment represents lands which are west of Bostwick Road and within the W3 draft plan. These lands have been considered to be tributary to the Colonel Talbot Pumping Station via Royal Magnolia Avenue during the design of this sewer, however, depending on the timing of construction of that outlet, they may also be serviced by the extension of the Exeter Road sewer through Areas 3 and 4 as outlined above. The table below outlines the various land uses within the catchment area.

	Area (ha)	Units		Density	Population
Medium Density	10.12	759	Unit count using 75 u/ha	2.4 p/u	1822
Roadways and Other Blocks	2.91				0
<b>Total</b>	<b>13.03</b>				<b>1822</b>

### Area 7 Catchment

Areas 7 represents lands in the second phase of the W3 subdivision. These lands are tributary to the sanitary sewer on Royal Magnolia Drive which will ultimately outlet to the Colonel Talbot Pumping Station. Development of this phase of the subdivision is proceeding with flows temporarily contributing to the Cambell Street trunk sewer, and like some areas within W3 Phase 1, the ultimate sewer connection is via Royal Magnolia Ave to the Colonel Talbot Pumping Station. The table below outlines the various land uses within the catchment area.

	Area (ha)	Units		Density	Population
Low Density	8.83	118	Unit count from draft plan	3 p/u	354
School Block	2.02		Population per City of London standard		600
<b>Total</b>	<b>10.85</b>				<b>954</b>

Area and population is calculated based on the approved draft plan for this area and totals 10.85 ha with a population of 954. In the interim basis until the connection to the Colonel Talbot Pumping station is built, only the 118 lots can proceed based on capacities in the Campbell Street sewer, with the remainder proceeding with the ultimate connection to the pumping station.

Reference: Sanitary Servicing Analysis Bostwick Residential Neighbourhood, City of London

### Area 8 Catchment

Similar to Area 7, this catchment area discharges to the local sewer on Royal Magnolia Drive and ultimately discharges to the Colonel Talbot Pumping station. This catchment is part of the first phase of the W3 subdivision and on a temporary basis, it connects to the sewer on Campbell Street. On completion of the sanitary sewers connecting this catchment to the Colonel Talbot Pumping Station, flows from this catchment area will be redirected. Area and population is calculated based on the approved draft plan and are detailed in the detailed engineering drawings for this subdivision. The area totals 10.19 ha with a population of 535.

### Area 9 Catchment

Area 9 represents lands within the Auburn Developments Heathwoods Phase 2 subdivision which are currently being developed and are tributary to the extension of the Campbell Street sewer which has been extended to service the initial phases of the W3 subdivision. Area and population is calculated based on the approved draft plan and are detailed in the detailed engineering drawings for this subdivision. The area totals 4.21 ha with a population of 221.

### Area 10 Catchment

The Area 10 catchment represents lands within the first phase of the W3 subdivision which are tributary to the sewer on Royal Magnolia Avenue and Campbell Street which connects to the Campbell Street Trunk sewer at the intersection of Campbell Street and Ayrshire Avenue. Area and population is calculated based on the approved draft plan and are detailed in the detailed engineering drawings for this subdivision. The area totals 8.76 ha with a population of 820.

### Area 11 Catchment

The Area 11 catchment represents lands within the second draft plan for the W3 subdivision. These lands will discharge to a proposed local sewer within the phase which in turn will discharge to the trunk sewer on Colonel Talbot Road and the Colonel Talbot Pumping Station. The area of this phase is calculated at 30.67 ha and the population breakdown is outlined below based on the current draft plan.

	Area (ha)	Units		Density	Population
Low Density	5.85	176	Unit count using 30 u/ha	3 p/u	527
Medium Density	13.86	1040	Unit count using 75 u/ha	2.4 p/u	2494
Commercial	1.73		Population using 100 p/ha		173
Roadways and Other Blocks	9.23	0			0
<b>Total</b>	<b>30.67</b>				<b>3194</b>

Reference: Sanitary Servicing Analysis Bostwick Residential Neighbourhood, City of London

### Area 12 Catchment

The Area 12 catchment represents lands owned by Sifton Properties which are tributary to the Colonel Talbot Pumping station. These lands will discharge to a proposed local sewer within the subdivision which in turn will discharge to the trunk sewer on Colonel Talbot Road and the Colonel Talbot Pumping Station. The area of this phase is calculated at 28.82 ha and the population breakdown is outlined below based on the current draft plan.

	Area (ha)	Units		Density	Population
Single Family Lots		202	Unit count from draft plan	3 p/u	606
Low Density	1.12	34	Unit count using 30 u/ha	3 p/u	101
Medium Density	5.30	398	Unit count using 75 u/ha	2.4 p/u	954
<b>Total</b>	<b>28.82</b>				<b>1661</b>

All lands north of Area 12, including Area 13, discharge to the existing sanitary sewer system on the north side of Pack Road within the Talbot Village subdivision. Flow within this subdivision are collected and discharge to the Colonel Talbot trunk sewer at the intersection of Pack Road.

### Area EXT3 Catchment

The Area EXT3 catchment represents lands immediately south of the W3 subdivision and north west of Auburn's Heathwood subdivision which are proposed for medium density development. These lands will discharge to a proposed sewer on Colonel Talbot Road which in turn discharges to the proposed sewer on Royal Magnolia and Campbell Street which connects to the Campbell Street Trunk sewer at the intersection of Campbell Street and Ayrshire Avenue. The area of this phase is calculated at 9.16 ha and the population breakdown is outlined below based on the current site plan density for 3810 Colonel Talbot and the maximum capacity in the Royal Magnolia Ave sanitary sewer for this entire catchment area.

	Area (ha)	Units		Density	Population
Medium Density	<b>9.16</b>	421	Unit count using 46 u/ha	2.4 p/u	<b>1010</b>

Reference: Sanitary Servicing Analysis Bostwick Residential Neighbourhood, City of London

### **Area 14 Catchment**

The Area 14 Catchment consists of lands north of Savoy Street, west of Bostwick Road and south of the W3 subdivision. The lands consist of the campus of the Forest City Community Church, a woodlot and some development lands. As shown on the attached figure, the area of this catchment is calculated at 29.44 ha with a population of 2650. The area is proposed to discharge to the Savoy Street sewer (tributary of the Campbell Street sub-trunk sewer).

### **Area 15 Catchment**

The Area 15 Catchment is a portion of the Auburn Development lands south of the W3 subdivision and east of Campbell Street. The catchment is designated for single family residential development and is 5.95 ha in size. Using 30 u/ha and 3 people per lot, the population is calculated at 536.

### **Area 16 Catchment**

The Area 16 Catchment is the area on the west side of Colonel Talbot Road, west of the W3 subdivision with address of 3637 Colonel Talbot Road. The catchment is designated for medium density residential development and is 1.54 ha in size. Using 75 u/ha and 2.4 people per lot, the population is calculated at 278. This area will contribute to the trunk sanitary sewer on Colonel Talbot Road.

## **SANITARY CAPACITY VERIFICATION**

This report undertakes to compare the capacity of the outlets noted in previous sections to the catchments defined to discharge to those outlets in order to ensure sufficient capacity exists.

### **Southdale Road Outlet**

As noted in previous sections of this report, the capacity of this sewer has been previously established at 26.5 l/s prior to draft plan approval. When the sewer on Southdale Road was constructed, the City requested that 7.5 l/s be assigned to the new community centre, thus the remaining available capacity is calculated to be 19.0 l/s under peak flow conditions. Catchment Area 1 is the only catchment area remaining to be discharged to this outlet with a calculated peak flow limited to 19 L/s. In the interim, Blocks 1,2,3,4 and 5 will be directed to this outlet, providing a peak flow of 17.03 L/s, which is within the limited peak flow for this outlet. Under ultimate conditions, in order to include block 7 in this outlet, it is planned to remove Block 5 from this outlet and redirect the flows to the south to the Bradley Ave sewer or the Exeter Road sewer. In doing this, Block 7 can be developed with up to 476 apartment units while keeping within the limited peak flow of 19 L/s as noted earlier in this report.

Reference: Sanitary Servicing Analysis Bostwick Residential Neighbourhood, City of London

### Bradley Avenue/ Wonderland Rd Outlet

	Area (ha)	Population	Estimated Flow (l/s)
Catchment Area 2	14.87	2537	<b>25.1</b>
Existing Capacity	24.74	3142	<b>31.1</b>

The above table concludes that there is sufficient capacity in the Bradley Avenue sewer to receive catchment area 2 which is the only catchment tributary to this outlet.

### Exeter Road Sewer

	Area (ha)	Population	Estimated Flow (l/s)
Catchment Area 3	46.45	3538	
Catchment Area 4	22.97	2452	
Catchment Area 5	16.18	2220	
Catchment Area 6	13.03	1822	
Total Catchment Area	98.63	10,032	<b>86.8</b>
Existing Capacity	147.62	19,205	<b>149.4</b>

The above table concludes that there is sufficient capacity in the Exeter Road sewer to receive catchment areas 3, 4, 5 and 6.

Reference: Sanitary Servicing Analysis Bostwick Residential Neighbourhood, City of London

### Campbell Street Outlet (intersection of Campbell Street and Ayrshire Ave)

	Area (ha)	Population	Estimated Flow (l/s)
<b>Interim Condition</b>			
Catchment Area 7	8.83	354	
Catchment Area 8	10.19	535	
Catchment Area 9	4.21	221	
Catchment Area 10	8.76	820	
Total Catchment Area	31.99	1930	<b>20.33</b>
<b>Ultimate Condition</b>			
Catchment Area 9	4.21	221	
Catchment Area 10	8.76	820	
Catchment Area 15	5.95	536	
Catchment Area EXT-3	9.16	1010	
Total Catchment Area	28.08	2587	<b>26.49</b>
Existing Capacity	34.49		<b>46.3</b>

The above table concludes that there is sufficient capacity in the Campbell Street sewer to receive flows as noted on an interim and ultimate basis.

### Campbell Street Outlet (Beattie Street branch at north end of Savoy Street)

	Area (ha)	Population	Estimated Flow (l/s)
Catchment Area 14	27.31	2650	<b>26.1</b>
Existing Capacity	27.31	2650	<b>26.1</b>

The above table concludes that there is sufficient capacity in the sewer on Savoy Street to receive catchment area 14 which is the only catchment tributary to this outlet.

### Colonel Talbot Pumping Station

The Colonel Talbot Pumping Station has a significant catchment area of approximately 665 ha. The catchment area for this pumping station has been outlined on the drawings for the Colonel Talbot Pumping Station (sheet 21 of the drawing set). For the purposes of this report, we have compared the development areas shown in this report with the design areas shown in the Colonel Talbot Pumping Station design.

Reference: Sanitary Servicing Analysis Bostwick Residential Neighbourhood, City of London

Specifically, these areas are shown in the Colonel Talbot PS design as A2-1, A2-2, A2-4, A3-2 and A18 which total 105.5 ha with a population of 10263.

<b>Ultimate</b>	<b>Area (ha)</b>	<b>Population</b>	<b>Estimated Flow (l/s)</b>
Catchment Area 5 (potential option)	16.83	2220	
Catchment Area 6 (potential option)	13.03	1822	
Catchment Area 7	10.85	954	
Catchment Area 8	10.19	535	
Catchment Area 11	30.67	3194	
Catchment Area 12	28.82	1661	
Catchment Area 16	1.54	278	
Total Catchment Area	111.9	10664	<b>91.4</b>
Existing Capacity	105.5	10263	<b>99.01</b>

The above table concludes that there is sufficient capacity in the Colonel Talbot Pumping Station to receive flows from the catchment areas noted above.

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## SUMMARY

This report summarizes the delineation of the catchment areas and the outlet capacities in the South West area in order to provide guidance to future planning in this area. The report concludes that all outlets have sufficient capacity to service the catchment areas outlined.

Regards,

**Stantec Consulting Ltd.**



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Attachment: Sanitary Drainage Area Plan Part 1, Part 2

c. C.C.

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## Area 1 (excluding block 7) Current Draft Plan Limits

	Area (ha)	Density	Population	Infiltration Flow (l/s)	Population Flow (avg. day l/s)	Cumulative Population	Peaking Factor	Peak Flow by Block (l/s)	Cumulative Peak Flow (l/s)	
Severance Block - SE corner of Southdale and Bostwick(Blk 1)	1.54	370 apartment units 2397 m <sup>2</sup> gfa commercial	1.6 ppu see note below	592 96	0.15	1.83	688	3.71	6.94	
Draft Plan - Block 2	0.92	144 apartment units 20 townhouse units	1.6 ppu 2.4 ppu	278	0.09	0.74	966	3.65	2.80 9.63	
Severance Block - SE corner of Southdale and Street 'A' (Blk 3)	1.124	150 apartment units	1.6 ppu	240	0.11	0.64	1206	3.61	2.42 11.94	
Draft Plan - Block 4	0.636 Park	Park		0.06		1206	3.61	0.06	12.00	
Severance Block - SE corner of Southdale and Street 'B' (Blk 5)	1.137	324 apartment units	1.6 ppu							
Streets 'A', 'B', 'C' and 'D'	2.341	255.4 m <sup>2</sup> gfa commercial Road allowance	see note below	529	0.11 0.23	1.41	1735 1735	3.52 3.52	5.07 0.23	16.80 17.03

Commercial and office density utilizes the City standard of 100 persons/ha at a 25% coverage. The conversion giving 25 persons per ha of gross floor area. Peaking factor includes an equivalent population of 680 to account for the community centre.

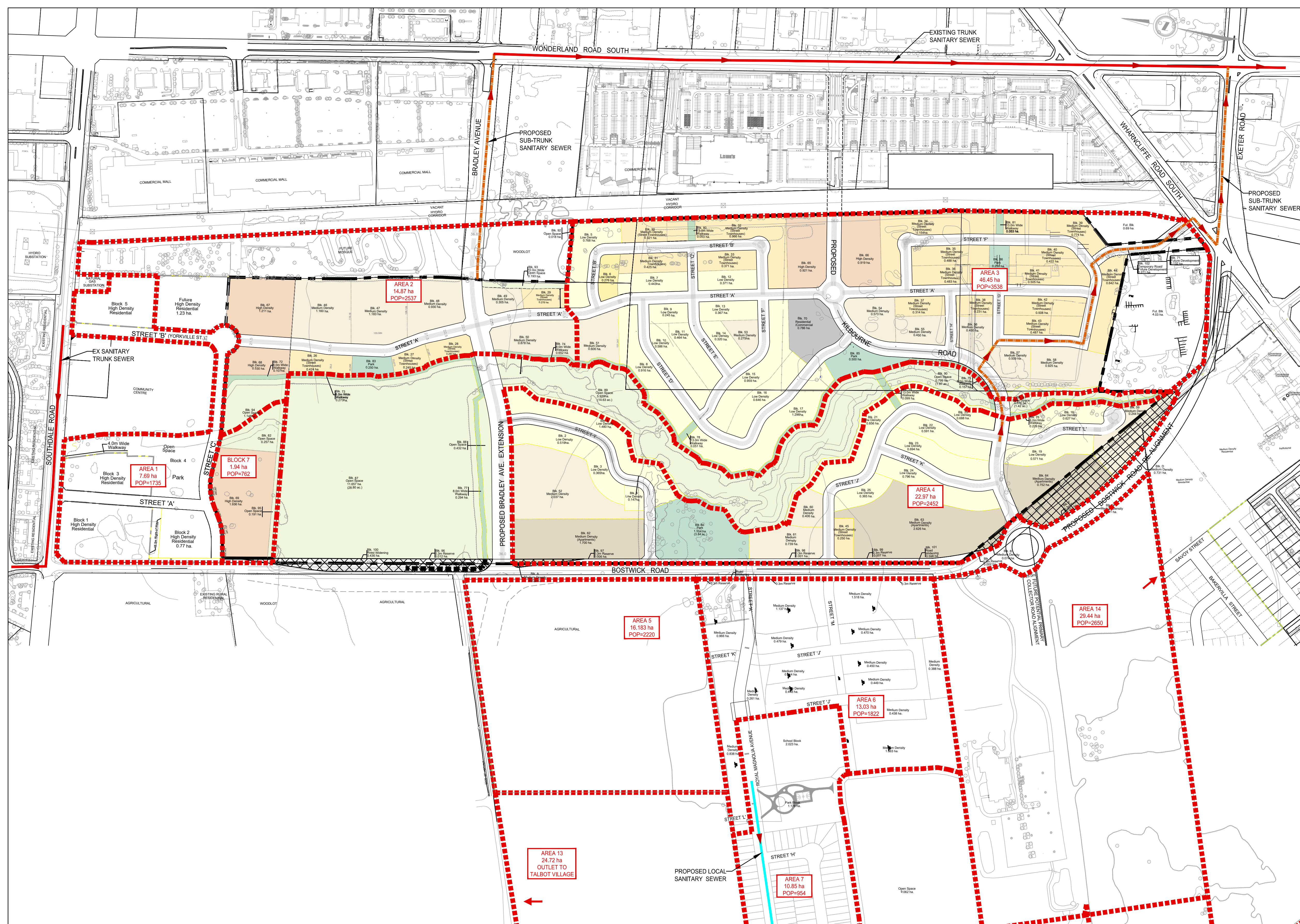
Target is 19.0 L/s (26.5 L/s Total - 7.5L/s Comm. Centre)

**Area 1(3080 Bostwick, excluding Block 5)  
Ultimate Conditions**

	Area (ha)	Density	Population	Infiltration Flow (l/s)	Population Flow (avg. day l/s)	Cumulative Population	Peaking Factor	Peak Flow by Block (l/s)	Cumulative Peak Flow (l/s)
Severance Block - SE corner of Southdale and Bostwick(Blk 1)	1.54	370 apartment units 2397 m <sup>2</sup> gfa commercial	1.6 ppu see note below	592 96	0.15	1.83	688	3.71	6.94
Draft Plan - Block 2	0.92	144 apartment units 20 townhouse units	1.6 ppu 2.4 ppu	278	0.09	0.74	966	3.65	2.80
Severance Block - SE corner of Southdale and Street 'A' (Blk 3)	1.124	150 apartment units	1.6 ppu	240	0.11	0.64	1206	3.61	2.42
Draft Plan - Block 4	0.636	Park			0.06		1206	3.61	0.06
Severance Block - SE corner of Southdale and Street 'B' (Blk 5)									
Streets 'A', 'B', 'C' and 'D'	2.341	Road allowance			0.12		1206	3.61	0.12
Block 7 - south of Street 'C' west of the Thomicroft	1.936	476 apartment units	1.6 ppu	762	0.19	2.03	1968	3.49	7.26
									19.00 Target is 19.0 L/s (26.5 L/s Total - 7.5L/s Comm. Centre)

Commercial and office density utilizes the City standard of 100 persons/ha at a 25% coverage. The conversion giving 25 persons per ha of gross floor area. Peaking factor includes an equivalent population of 680 to account for the community centre.

- Adjusted unit count for Block 7 from 710 apartments and 24 townhouses to meet the 19.0L/s
- Removed Block 5 in order to send it to Bradley Ave Sewer (Area 2) or Exeter Rd Outlet (Area 3)



1. AREA 1 UPDATE	CHK	DWH	23.02.22
Revision	By	Appd.	YY.MM.DD
Issued	By	Appd.	YY.MM.DD
File Name: 161413622_20211216_c-plan_fig	CHK	JP	CHK
	Dwn.	Chkd.	Chkd.
Permit-Seal		Disgn.	22.03.21
			YY.MM.DD

Client/Project  
YORK DEVELOPMENTS  
KILBOURNE/W3  
London, ON Canada  
Title  
SANITARY DRAINAGE AREA PLAN  
PART 1

Project No. 161413622	Scale HORZ - 1 : 3500 35 0 70m
Drawing No. 1	Sheet 1 of 2
	Revision 1

